REMARKS

This Amendment is responsive to the Final Office Action dated October 12, 2006, and the Advisory Action dated December 27, 2006. Applicant has amended claims 1, 5-10, 13, 18, 19, 23-24, 26-29, 37, 38, 42-45 and 48. Applicant has added claims 55 and 56. Claims 2-4, 20-22 and 39-41 have been cancelled. Claims 1, 5-19, 23-39, 42-48 and 50-56 will be pending upon entry of this Amendment.

Claim Rejection Under 35 U.S.C. § 112

The Final Office rejected claim 19 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Advisory Action maintained this rejection, contending that claim 19 as previously presented was incomplete because there was no means to deliver therapy.

Applicant disagrees. Claim 19 as previously presented was "complete" and, more relevantly, definite. Furthermore, claim 19 as previously presented recited that therapy was delivered by the medical device.

Nonetheless, in the interest of advancing the prosecution of the present application, Applicant has amended claim 19 to recite a therapy delivery module. Applicant submits that amended claim 19 particularly points out and distinctly claim the subject matter, as required by 35 U.S.C. § 112, second paragraph.

Claim Rejections Under 35 U.S.C. § 102 and § 103

The Final Office Action rejected claims 1-3, 8-10, 12, 13, 16, 18-21, 27-29, 32, 35-40, 43-45 and 48-54 under 35 U.S.C. § 102(b) as being anticipated by Torgerson et al. (US 5,893,883, hereinafter "Torgerson"). The Final Office Action also rejected claims 11, 30 and 46 under 35 U.S.C. § 102(b) as anticipated by Torgerson or, in the alternative, under 35 U.S.C. 103(a) as obvious over Torgerson in view of Schallhorn (US 6,120,467). The Final Office Action also rejected claims 4-7, 17, 22-26, 33, 35-37, 41 and 42 under 35 U.S.C. § 103(a) as being unpatentable over Torgerson in view of Schallhorn (US 6,120,467), and rejected claims 14,

15, 31, 34 and 47 under 35 U.S.C. § 103(a) as being unpatentable over Torgerson in view of Bourgeois (US 5,058,584).

Applicant respectfully traverses these rejections to the extent that such rejections may be considered applicable to the claims as amended. Torgerson fails to disclose each and every feature recited by the amended claims, as required by 35 U.S.C. § 102(b). Furthermore, no combinations of the applied references would have suggested modification of Torgerson to include such features, as required by 35 U.S.C. § 103(a).

Amended independent claim 1 recites monitoring an output of a sensor, the output of the sensor reflecting a physiological parameter of a patient, defining an event based on the sensor output, and monitoring therapy delivered by a medical device during occurrence of the defined event. Amended claim 1 also requires generating therapy information based on the monitored therapy, associating the therapy information with the defined event, subsequently detecting the defined event by monitoring the output of the sensor and comparing the sensor output to the defined event, and automatically providing therapy to a patient via the medical device according to the therapy information in response to the detection. Amended independent claims 19 and 38 require similar elements.

None of the applied references discloses or suggests subsequently detecting an event, previously defined based on sensor output, by monitoring the output of the sensor and comparing the sensor output to the previously defined event, as required by the amended independent claims. Furthermore, none of the applied references discloses or suggests automatically providing therapy to a patient via the medical device in response to the subsequent detection of the defined event according to therapy information associated with the previously defined event that was determined by based on monitoring of the therapy delivered during the previous occurrence of the defined event, as required by the amended independent claims.

For a prima facie case of obviousness, the combined references must disclose or suggest all of the claim limitations. In the instant case, there are a number of limitations of the amended independent claims that are not disclosed or suggested by any of the applied references. For at least this reason, the applied references cannot be used to establish a prima facie case of obviousness for the amended independent claims.

The Advisory Action indicated that Torgerson discloses subsequently detecting the defined event and providing therapy to a patient via the medical device according to the therapy information in response to the detection. The Advisory Action pointed to the disclosure of Torgerson that states, "pain can be further minimized because the stimulation signal parameters can be adjusted to accommodate all possible daily activities."[1] However, Torgerson discloses user identification of daily activities, and manual adjustment of stimulation. The Advisory Action recognized that Torgerson fails to disclose "monitoring a sensor to define and [subsequently] detect the event."[2] Furthermore, Torgerson does not disclose or suggest automatically providing therapy according to therapy information previously associated with the event in response to subsequently detecting the event.

The amended independent claims recite features from claims 4 and 22, which are now cancelled. The Advisory Action emphasized that Schallhorn was relied upon for the teaching of utilizing a sensor to determine events in the rejection of these claims. However, Schallhorn does not teach defining an event based on the sensor output and subsequently detecting the event. Further, Schallhorn does not teach comparing the sensor output to the defined event. Moreover, Schallhorn does not teach automatically providing therapy according to associated information in response to subsequently detecting a previously defined event.

The Schallhorn device is described as directed to "monitoring and obtaining an historical representation or profile of the activity level and/or therapy adjustments of a patient."[3] Indeed, the Schallhorn disclosure describes "a processor which is programmed to translate and categorize sensor output data into a number of predetermined activity categories."[4] In this manner, the Schallhorn device does not define an event based on the current sensor output. Instead, the Schallhorn device categorizes sensor output data as being in one of a certain number of predefined categories.

Furthermore, even if categorizing the activity sensor output was incorrectly considered to be defining an event within the meaning of Applicant's claims, there is no teaching within Schallhorn of subsequently comparing later obtained sensor output to the previously obtained

[1] Torgerson et al., Col. 9-10, ll. 66-1.
[2] Office Action, Page 5.
[3] Schallhorn, Col. 1, ll. 64-66.
[4] Schallhorn, Col. 2, ll. 4-6.

sensor output which defined the event in order to detect the defined event. Indeed, Schallhorn does not discuss using the activity level or therapy adjustments of the profile that is obtained by monitoring the output of the sensor in order to detect the defined event. Instead, Schallhorn discloses that "[a] physician may then retrieve and review the activity level profile [and] use it to objectively interpret subjective information obtained by interviewing the patient."[5] The profile is reviewed by a physician. Schallhorn fails to teach or suggest subsequently detecting the defined event by monitoring the output of the sensor and comparing the sensor output to the defined event. Furthermore, the mere teaching of utilizing a sensor to determine events would not have in any way suggested modification of the Torgerson device to automatically provide therapy according to associated information in response to subsequently detecting a previously defined event.

Dependent claims 8-10, 12, 13, 16, 18, 27-29, 32, 35-37, 43-45, 48 and 50-55 are allowable for at least the reasons put forth above with respect to independent claims 1, 19 and 38.

Torgerson, Schallhorn, Bourgeois, and any combination therein, fails to disclose each and every limitation set forth in claims 1, 5-19, 23-38, 42-48 and 50-56. For at least these reasons, the Advisory Action has failed to establish a prima facie case for anticipation of Applicant's claims 1, 5-19, 23-38, 42-48 and 50-56 under 35 U.S.C. § 102(b). In addition, the Advisory Action has failed to establish a prima facie case for non-patentability of Applicant's claims 1, 5-19, 23-38, 42-48 and 50-56 under 35 U.S.C. § 103(a). Withdrawal of these rejections is requested.

New Claims

Applicant has added claims 55 and 56 to the pending application. Dependent claim 55 is dependent upon independent claim 1, and is patentable for at least the reasons discussed above. Furthermore, the applied references fail to disclose or suggest the requirements of new independent claim 56. For example, the applied references fail to disclose or suggest monitoring an output of a sensor, the output of the sensor reflecting a posture of a patient, and defining a posture event based on the sensor output, as recited by new claim 56. No new matter has been added by the new claims.

[5] Schallhorn, Col. 2, ll. 8-10.

CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Date: 3-12-07

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